



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,720	08/20/2003	Steven R. Mead	1-29092	8169

4859 7590 08/08/2007
MACMILLAN SOBANSKI & TODD, LLC
ONE MARITIME PLAZA FIFTH FLOOR
720 WATER STREET
TOLEDO, OH 43604-1619

EXAMINER

LAUX, JESSICA L

ART UNIT	PAPER NUMBER
----------	--------------

3635

MAIL DATE	DELIVERY MODE
-----------	---------------

08/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/645,720	Applicant(s) MEAD, STEVEN R.	
	Examiner Jessica Laux	Art Unit 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 19-32, 34-40 and 42-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 19-32, 34-40, 42-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of the species restriction between species I and II in the reply filed on 5/21/07 is acknowledged. The traversal is on the ground(s) that it would not be a burden to search either species as they merely relate to the position of the moisture-proof film layer. This is found persuasive and accordingly claims 16 and 40 will be examined and the restriction between species I and species II is hereby withdrawn; however the species restriction between the remaining species stands as previously presented.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-12, 19-32, 34-38, 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finley et al (5578363) in view of Ebert (4464428).

Art Unit: 3635

Regarding claims 1 and 19-20, 31-32: Finley discloses a multi-layered flooring composite for use over a subfloor layer, said composite including a substantially horizontal top floor layer of substantially hard material (7), a subfloor layer of substantially hard material (6) and at least one acoustic layer (1) positioned between said top floor layer and said subfloor layer (where said layer includes a foam layer, abstract).

Finley does not expressly disclose the characteristic of the foam layer. Ebert al. discloses a closed cell foamed material, of polypropylene or polyethylene, useful in the bulidng costruction industry for sound attenuation (col. 1, line 22 and col. 3, line 52-53) where the claim limitations of "a plurality of discrete beads of substantially elastic, resilient material wherein portions of adjacent beads abut one another and other portions of said adjacent beads are spaced from each other to create spaces therebetween and wherein substantially all of said adjacent beads are integrally joined together at the abutting portions thereof" are inherent properties of a closed cell foam. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the insulating foam layer of Finley to be as disclosed by Ebert as it is well known in the art to use closed cell foam layers in building construction for the purposes of insulation and sound attenuation (as disclosed by Ebert).

Regarding claims 2-12, 22-23, 35-38: The limiations of claims 2-12 relating to the shape and location (including spaces) of the beads are merely limitations inherent to any of the various designs and constructions of a closed cell foam, as already known in the art. Further absent any criticality regarding the specific limitations of the claimed

Art Unit: 3635

features, it appears to be mere design choice, obvious to one of ordinary skill in the art, which fails to patentably distinguish over the prior art, to use a closed foam containing the claimed characteristics as either foam would perform the function of sound attenuation.

Regarding claim 21: The flooring composite of claim where the density of the acoustic layer is about 2-10 pounds per cubic foot (col. 4, line 65; where 70 kg/m³ is approximately 4 pounds per cubic foot).

Regarding claims 24-26: Finley in view of Ebert disclose the flooring composite as above, but do not expressly that the thickness is 1/8 inch or that the diameters are 1/8 inch, the same, or 1/4 inch. However, applicant has not disclosed that the claimed limitations provide an advantage, solve a problem, or are for a particular purpose. Therefore it appears to be a mere matter of design choice to one of ordinary skill in the art to use a closed foam having the claimed characteristic or those as disclosed by Ebert as one would expect applicant's invention and that of Ebert to perform the same function of sound attenuation equally well considering the properties of a closed foam. Therefore absent and criticality the claimed limitations are anticipated by the prior art.

Regarding claims 27-29, 42-44: Finley in view of Ebert disclose the claimed flooring composite as above, but do not expressly disclose the claimed percentages of beads and air spaces. However applicant has not disclosed that the claimed percentages provide an advantage or are for a particular purpose; furthermore the percentages appear to be obvious design choices for closed cell foams and one of ordinary skill in the art would be motivated to use any closed cell foam containing the

Art Unit: 3635

various percentages as such a foam would provide the function of sound attenuation equally well consider the properties of a closed cell foam and specifically that as disclosed by Ebert.

Regarding claims 30, 34: Finley in view of Ebert discloses the flooring composite as in claims 1 and 31 above, but does not expressly disclose that the acoustic layer includes inelastic and elastic beads. Ebert does disclose (col. 3, lines 46-64) that various materials may be used in a foam to effect the elastic qualities of the foam. It therefore would have been obvious to one of ordinary skill in the art to use an of various known materials for closed cell foams to achieve various elastic qualities of the foam for the purposes of sound attenuation. Further absent any critically disclosed by applicant regarding the claimed elastic qualities, it appears to be mere matter of design choice which fails to patentably distinguish from the prior art.

Claims 13-16, 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finley et al (5578363) in view of Ebert (4464428) and further in view of Fiechtl (6189279).

Regarding claims 13-16, 39-40: Finley in view of Ebert discloses the flooring composite as above, but does not disclose a moisture-proof film. Fiechtl discloses a floor system having a foam sound insulating layer and further including a moisture-proof film layer (18), where the layer is attached to at least some of the beads as it is attached to the foam comprised of the those beads.

The claimed limitations regarding the location of the film layer being between the acoustic layer and the subfloor or above the acoustic layer appear to be mere a mere

Art Unit: 3635

design choice as applicant has not disclosed that either position provides an advantage, solves a stated problem or is used for a particular purpose, but rather discloses either position be an acceptable position. Therefore absent a showing of criticality, the limitation is anticipated by the prior art as disclosed above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica Laux whose telephone number is 571-272-8228. The examiner can normally be reached on Monday thru Friday, 6:30am to 2:30pm (est).

Art Unit: 3635

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JL
8/5/07

/J. CHAPMAN/
PRIMARY EXAMINER
ART UNIT 3635